REMARKS

New Claims

In order to facilitate prosecution, Applicants have added new claims 7-11. Support is found the specification and claims as originally filed. No new matter has been added.

Amended Claims

In order to facilitate prosecution, Applicants have amended claims 1-6 to more clearly define embodiments of the invention. Support is found the specification at, for example, pages 5-6 and the claims as originally filed. No new matter has been added.

Rejection Under 35 U.S.C. § 112, 2nd Paragraph

The Examiner rejects claims 1-6 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully traverse this rejection.

Applicants submit that the claims are clear to one of ordinary skill in the art. Nevertheless, in order to expedite prosecution, Applicants have amended the claims to further define embodiments of the claimed invention. None of these amendments adds new matter. Applicants respectfully request that the rejections under 35 U.S.C. §112, second paragraph be considered and withdrawn.

Rejection Under 35 U.S.C. § 101

The Examiner rejects claim 5 under 35 U.S.C. §101 as being directed to a non-statutory subject matter. More specifically, the Examiner asserts that claim 5 is directed to the "use" which is a non-statutory subject matter. Applicants respectfully traverse this rejection.

Applicants submit that the Examiner has not made a *prima facie* case that the claims are directed to non-statutory subject matter. The Examiner has not

shown that the embodiment of the invention in claim 5 is not useful. However, to expedite prosecution of the present invention, Applicants have amended claim 5 to further define the process for electrodeposition of glossy gold and gold alloy layers using the claimed electrodeposition bath to deposit glossy gold and gold alloys. None of these amendments adds new matter. Applicants respectfully request that the rejection under 35 U.S.C. §101 be reconsidered and withdrawn

Rejection Under 35 U.S.C. § 102(b)

The Examiner rejects claims 1, 4, 5 and 6 under 35 U.S.C. §102(b) as being anticipated by CH Patent No. 629,258 ("Marka"). Applicants respectfully traverse this rejection.

For a rejection to be sustained under 35 U.S.C. §102(b), each and every element of the claimed invention must be disclosed in the cited prior art reference. Marka discloses an acid bath for plating a white gold alloy (see abstract). Marka further discloses that the acid bath contains nickel or cobalt water-soluble compounds, alkali or ammonium aurocyanide salts, at least one 2-8C hydroxy- or amino acids containing one amino or 1-6 hydroxy groups and 1-3 carboxy groups and as a brightener an aromatic and/or aliphatic sulfonic or sulfuric acid (see abstract).

However, Marka does not disclose an electrodeposition bath containing at least one specific gloss additive selected from the group consisting of pyridine-3-sulfonic acid, nicotinic acid, nicotinic acid amide, 3-(3-pyridyl)-acrylic acid, 3-(4-imidazolyl)-acrylic acid, 3-pyridylhydroxymethanesulfonic acid, pyridine, picoline, quinolinesulfonic acid, 3-aminopyridine, 2,3-diaminopyridine, 2,3-di-(2-pyridyl)-pyrazine, 2-(pyridyl)-4-ethanesulfonic acid, 1-(3-sulfopropyl)-pyridinium betaine, 1-(3-sulfopropyl)-isoquinolinium betaine and salts or derivatives thereof; in combination with a sulfonate or sulfate of the general formula I as an additional gloss additive.

In contrast, the present invention claims an electrodeposition bath for depositing glossy gold and gold alloy layers, the bath contains at least one specific gloss additive, as mentioned above, in combination with a sulfonate or sulfate of the general formula I as an additional gloss additive. The electrodeposition bath of the claimed invention achieves improved current density/working range and improved rate of deposition (see the specification at page 2, lines 1-7).

Since Marka does not disclose, teach or suggest the claimed gloss additive in combination with the additional gloss additive containing a sulfonate or sulfate of the general formula I, then it is respectfully submitted that Marka does not disclose each and every element of the claimed invention. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

Response to Rejection Under 35 U.S.C. § 103(a)

The Examiner rejects claims 2 and 3 under 35 U.S.C. §103(a) as being unpatentable over Marka. Applicants respectfully traverse this rejection.

Applicants respectfully submit that Marka fails to disclose each and every element of the presently claimed invention, therefore a rejection under 35 U.S.C. §103 should not be made.

As discussed above, Marka does not disclose an electrodeposition bath containing at least one specific gloss additive selected from the group consisting of pyridine-3-sulfonic acid, nicotinic acid, nicotinic acid amide, 3-(3-pyridyl)-acrylic acid, 3-(4-imidazolyl)-acrylic acid, 3-pyridylhydroxymethanesulfonic acid, pyridine, picoline, quinolinesulfonic acid, 3-aminopyridine, 2,3-diaminopyridine, 2,3-di-(2-pyridyl)-pyrazine, 2-(pyridyl)-4-ethanesulfonic acid, 1-(3-sulfopropyl)-pyridinium betaine, 1-(3-sulfopropyl)-isoquinolinium betaine and salts or derivatives thereof; in combination with a sulfonate or sulfate of the general formula I as an additional gloss additive.

In contrast, the present invention claims an electrodeposition bath for depositing glossy gold and gold alloy layers, the bath contains at least one specific gloss additive, as mentioned above, in combination with a sulfonate or sulfate of the general formula I as an additional gloss additive.

The electrodeposition bath of the claimed invention achieves improved current density/working range and improved rate of deposition. For example, in example 1, the working range can be up to 3 A/dm^2 if pyridine-3-sulfonic acid is used alone as a gloss additive which corresponds to a deposition rate of 0.98 $\mu m/min$ (pages 7-8. lines 23-31 and 1-15). The addition of 1g/l of nonyl sulfate as a further gloss additive increases the maximum current density to more than 5 A/dm^2. This corresponds to an improvement of more than 66 %. By increasing the pH value of the electrodeposition bath of example 1, a 17 % increase of the deposition rate can be achieved with the same or an even wider working range. Examples 2-6 further illustrate the improved results on the working range and the deposition rate achieved by combining the gloss additive and additional gloss additive. Table 1 on page 11 shows the improved deposition rate and working range when both the gloss additives and additional gloss additives are combined.

Marka simply does not disclose, teach or suggest this aspect of the claimed invention. Accordingly, it is respectfully submitted that Marka does not disclose, teach or suggest the claimed gloss additive in combination with the additional gloss additive containing a sulfonate or sulfate of the general formula I. Therefore, Applicants respectfully request that the rejection under 25 U.S.C. §103(a) be reconsidered and withdrawn.

Conclusion

All of the stated grounds of the rejections have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that the present application is in condition for Allowance. Entry of amendment, and reconsideration of the application is respectfully requested.

If any additional fees are due, or an overpayment has been made, please charge, or credit, our Deposit Account No. 11-0171 for such sum.

If a telephone conference would be of assistance in furthering the prosecution of the application, Applicants' undersigned attorney requests that she be contacted at the telephone number provided below.

Respectfully submitted,

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